Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 – 15 (cancelled).

Claim 16 – 36 (withdrawn).

Claim 37 (previously presented): A composition comprising a self-reversible invert latex, wherein said self-reversible invert latex comprises

a) an oily phase,

b) an aqueous phase,

c) at least one water-in-oil type emulsifying agent, and

d) at least one oil-in-water type emulsifying agent,

wherein said water-in-oil type emulsifying agent or said oil-in-water type emulsifying agent comprises at least one cationic polyelectrolyte composition, and

wherein said cationic polyelectrolyte composition comprises a plurality of copolymerized monomeric units of at least one cationic monomer with at least one neutral monomer and at least one nonionic surfactant monomer.

Claim 38 (previously presented): The composition according to Claim 37, wherein said cationic polyelectrolyte composition present is in a range of from about 20% to about 70% by weight of said self-reversible invert latex.

Claim 39 (currently amended): The composition according to Claim 38, wherein said range ~~of~~ is from about 25% to about 40% by weight of said self-reversible invert latex.

Claim 40 (currently amended): The composition according to Claim 38, wherein said self-reversible invert latex comprises ~~an~~ said water-in-oil type emulsifying agent or said oil-in-water type emulsifying agent in a range of from about 2.5% to about 15% by weight of said self-reversible invert latex.

Claim 41 (previously presented): The composition according to Claim 40, wherein said range is from about 4% to about 9%.

Claim 42 (previously presented): The composition according to Claim 38, wherein said water-in-oil type emulsifying agent present is in a range of from about 20% to about 50% by weight of said self-reversible invert latex.

Claim 43 (previously presented): The composition according to Claim 42, wherein said range is from about 25% to about 40%.

Claim 44 (currently amended): The composition according to ~~Claim 38~~ Claim 37, wherein said oil-in-water type emulsifying agent present is in a range of from about 50% to about 80% by weight of said self-reversible invert latex.

Claim 45 (previously presented): The composition according to Claim 44, wherein said range is from about 60% to about 75%.

Claim 46 (previously presented): The composition according to Claim 38, wherein said self-reversible invert latex comprises an oily phase in a range of from about 15% to about 50% by weight of said self-reversible invert latex.

Claim 47 (previously presented): The composition according to Claim 46, wherein said range is from about 20% to about 25%.

Claim 48 (previously presented): The composition according to Claim 38, wherein said self-reversible invert latex comprises water in a range of from about 5% to about 60% by weight of said self-reversible invert latex.

Claim 49 (previously presented): The composition according to Claim 48, wherein said range is from about 20% to about 50%.

Claim 50 – 59 (withdrawn).

Claim 60 (previously presented): The composition according to Claim 38, wherein said neutral monomer comprises at least one component selected from the group consisting of:

a) acrylamide,
b) methacrylamide,
c) vinylpyrrolidone,
d) diacetone-acrylamide,
e) dimethylacrylamide,
f) (2-hydroxyethyl) acrylate,
g) (2,3-dihydroxypropyl) acrylate,
h) (2-hydroxyethyl) methacrylate, and
i) (2,3-dihydroxypropyl) methacrylate.

Claim 61 (currently amended): A composition comprising a self-reversible invert latex, wherein said self-reversible invert latex comprises

a) an oily phase,
b) an aqueous phase,
c) at least one water-in-oil type emulsifying agent, and
d) at least one oil-in-water type emulsifying agent,

wherein said water-in-oil type emulsifying agent or said oil-in-water type emulsifying agent comprises at least one cationic polyelectrolyte composition, and

wherein said cationic polyelectrolyte composition comprises a plurality of copolymerized monomeric units of at least one cationic monomer with at least one neutral monomer and at least one nonionic surfactant monomer,

wherein said neutral monomer comprises at least one component selected from the group consisting of:

a) acrylamide,
b) methacrylamide,
c) vinylpyrrolidone,
d) diacetone-acrylamide,
e) dimethylacrylamide,
f) (2-hydroxyethyl) acrylate,
g) (2,3-dihydroxypropyl) acrylate,
h) (2-hydroxyethyl) methacrylate, and

i) (2,3-dihydroxypropyl) methacrylate,

wherein said cationic polyelectrolyte composition present is in a range of from about 20% to about 70% by weight of said self-reversible invert latex, and

~~The composition according to Claim 60~~, wherein said composition further comprises an ethoxylated derivative of said component and the molecular weight of said derivative is in a range of from about 400 to about 1000.

Claim 62 (previously presented): The composition according to Claim 38, wherein said cationic monomer comprises at least one component selected from the group consisting of:

a) 2,N,N,N-tetramethyl-2-[(1-oxo-2-propenyl)amino]propanammonium chloride (AMPTAC),
b) 2,N,N-trimethyl-2-[(1-oxo-2-propenyl)amino]propanammonium chloride,
c) N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]propanammonium chloride (APTAC),
d) diallyldimethylammonium chloride (DADMAC),
e) N,N,N-trimethyl-2-[(1-oxo-2-propenyl)]ethanammonium chloride,
f) N,N,N-trimethyl-2-[(1-oxo-2-methyl-2-propenyl)]ethanammonium chloride,
g) N-[2-(dimethylamino)-1,1-dimethyl]acrylamide, N-[2-(methylamino)-1,1-dimethyl]acrylamide, 2-(dimethylamino)ethyl acrylate,
h) 2-(dimethylamino)ethyl methacrylate, and
i) N-[3-(dimethylamino)propyl]acrylamide.

Claim 63 (previously presented): The composition according to Claim 38, wherein said nonionic surfactant monomers are represented by at least one formula selected from the group consisting of:

a) $A\text{-}C(=O)\text{-}O\text{-}[(CH_2\text{-}CH(R_1)\text{-}O]_n\text{-}R$ (I)
b) $R'\text{-}[O\text{-}CH(R'_1)\text{-}CH_2]_n\text{-}O\text{-}(O=)C\text{-}A'\text{-}C(=O)\text{-}O\text{-}[(CH_2\text{-}CH(R_1)\text{-}O]_n\text{-}R$ (I')

wherein said n and said n' each are in a range of from about 1 to about 50;

wherein said A is an unsaturated aliphatic monovalent radical comprising from about 2 to about 6 carbon atoms;

wherein said A' is an unsaturated aliphatic divalent radical comprising from about 2 to about 6 carbon atoms;

wherein said R_1 and said R'_1 each comprise at least one component selected from the group consisting of a hydrogen atom, a methyl radical, and an ethyl radical;

wherein said R and said R' each comprise an aliphatic hydrocarbon radical which is saturated, unsaturated, linear, or branched; and

wherein said aliphatic hydrocarbon radicals of said R and said R' each further comprise from about 8 to about 30 carbon atoms.

Claim 64 (previously presented): The composition according to Claim 63, wherein said A comprises at least one component selected from the group consisting of:

a) vinyl radical, and

b) 2-propenyl radical.

Claim 65 (previously presented): The composition according to Claim 63, wherein said A' comprises at least one component selected from the group consisting of:

a) 1,2-ethenediyl radical, and

b) 2-propene-1,2-diyl radical.

Claim 66 (currently amended): A composition comprising a self-reversible invert latex, wherein said self-reversible invert latex comprises

a) an oily phase,

b) an aqueous phase,

c) at least one water-in-oil type emulsifying agent, and

d) at least one oil-in-water type emulsifying agent,

wherein said water-in-oil type emulsifying agent or said oil-in-water type emulsifying agent comprises at least one cationic polyelectrolyte composition,

wherein said cationic polyelectrolyte composition comprises a plurality of copolymerized monomeric units of at least one cationic monomer with at least one neutral monomer and at least one nonionic surfactant monomer,

wherein said cationic polyelectrolyte composition present is in a range of from about 20% to about 70% by weight of said self-reversible invert latex,

wherein said nonionic surfactant monomers are represented by at least one formula selected from the group consisting of:

a) $A\text{-}C(=O)\text{-}O\text{-}[(CH_2\text{-}CH(R_1)\text{-}O]_n\text{-}R$ (I)

b) $R'\text{-}[O\text{-}CH(R'_1)\text{-}CH_2]_{n'}\text{-}O\text{-}(O=)C\text{-}A'\text{-}C(=O)\text{-}O\text{-}[(CH_2\text{-}CH(R_1)\text{-}O]_n\text{-}R$ (I')

wherein said n and said n' each are in a range of from about 1 to about 50;

wherein said A is an unsaturated aliphatic monovalent radical comprising from about 2 to about 6 carbon atoms;

wherein said A' is an unsaturated aliphatic divalent radical comprising from about 2 to about 6 carbon atoms;

wherein said R_1 and said R'_1 each comprise at least one component selected from the group consisting of a hydrogen atom, a methyl radical, and an ethyl radical;

wherein said R and said R' each comprise an aliphatic hydrocarbon radical which is saturated, unsaturated, linear, or branched;

wherein said aliphatic hydrocarbon radicals of said R and said R' each further comprise from about 8 to about 30 carbon atoms, and

~~The composition according to Claim 63,~~ wherein said aliphatic hydrocarbon radicals of said R and said R' each comprise from about 8 to about 18 carbon atoms.

Claim 67 (currently amended): A composition comprising a self-reversible invert latex, wherein said self-reversible invert latex comprises

a) an oily phase,

b) an aqueous phase,

c) at least one water-in-oil type emulsifying agent, and

d) at least one oil-in-water type emulsifying agent,

wherein said water-in-oil type emulsifying agent or said oil-in-water type emulsifying agent comprises at least one cationic polyelectrolyte composition,

wherein said cationic polyelectrolyte composition comprises a plurality of copolymerized monomeric units of at least one cationic monomer with at least one neutral monomer and at least one nonionic surfactant monomer,

wherein said cationic polyelectrolyte composition present is in a range of from about 20% to about 70% by weight of said self-reversible invert latex,

wherein said nonionic surfactant monomers are represented by at least one formula selected from the group consisting of:

a) $A\text{-}C(=O)\text{-}O\text{-}[(CH_2\text{-}CH(R_1)\text{-}O]_n\text{-}R$ (I)

b) $R'\text{-}[O\text{-}CH(R'_1)\text{-}CH_2]_{n'}\text{-}O\text{-}(O=)C\text{-}A'\text{-}C(=O)\text{-}O\text{-}[(CH_2\text{-}CH(R_1)\text{-}O]_n\text{-}R$ (I')

wherein said n and said n' each are in a range of from about 1 to about 50;

wherein said A is an unsaturated aliphatic monovalent radical comprising from about 2 to about 6 carbon atoms;

wherein said A' is an unsaturated aliphatic divalent radical comprising from about 2 to about 6 carbon atoms;

wherein said R_1 and said R'_1 each comprise at least one component selected from the group consisting of a hydrogen atom, a methyl radical, and an ethyl radical;

wherein said R and said R' each comprise an aliphatic hydrocarbon radical which is saturated, unsaturated, linear, or branched;

wherein said aliphatic hydrocarbon radicals of said R and said R' each further comprise from about 8 to about 30 carbon atoms, and

~~The composition according to Claim 63,~~, wherein said R and said R' each comprise at least one linear primary alcohol selected from the group consisting of:

a) octyl,
b) pelargonic,
c) decyl,
d) undecyl,
e) undecenyl,
f) lauryl,
g) tridecyl,
h) myristyl,
i) pentadecyl,
j) cetyl,
k) heptadecyl,
l) stearyl,
m) oleyl,
n) linoleyl,
o) nonadecyl,
p) arachidyl,
q) behenyl, and
r) erucyl.

Claim 68 (currently amended): A composition comprising a self-reversible invert latex, wherein said self-reversible invert latex comprises

a) an oily phase,

b) an aqueous phase,

c) at least one water-in-oil type emulsifying agent, and

d) at least one oil-in-water type emulsifying agent,

wherein said water-in-oil type emulsifying agent or said oil-in-water type emulsifying agent comprises at least one cationic polyelectrolyte composition,

wherein said cationic polyelectrolyte composition comprises a plurality of copolymerized monomeric units of at least one cationic monomer with at least one neutral monomer and at least one nonionic surfactant monomer,

wherein said cationic polyelectrolyte composition present is in a range of from about 20% to about 70% by weight of said self-reversible invert latex,

wherein said nonionic surfactant monomers are represented by at least one formula selected from the group consisting of:

a) $A\text{-}C(=O)\text{-}O\text{-}[(CH_2\text{-}CH(R_1)\text{-}O]_n\text{-}R$ (I)

b) $R'\text{-}[O\text{-}CH(R'_1)\text{-}CH_2]_n\text{-}O\text{-}(O=)C\text{-}A'\text{-}C(=O)\text{-}O\text{-}[(CH_2\text{-}CH(R_1)\text{-}O]_n\text{-}R$ (I')

wherein said n and said n' each are in a range of from about 1 to about 50;

wherein said A is an unsaturated aliphatic monovalent radical comprising from about 2 to about 6 carbon atoms;

wherein said A' is an unsaturated aliphatic divalent radical comprising from about 2 to about 6 carbon atoms;

wherein said R_1 and said R'_1 each comprise at least one component selected from the group consisting of a hydrogen atom, a methyl radical, and an ethyl radical;

wherein said R and said R' each comprise an aliphatic hydrocarbon radical which is saturated, unsaturated, linear, or branched;

wherein said aliphatic hydrocarbon radicals of said R and said R' each further comprise from about 8 to about 30 carbon atoms, and

~~The composition according to Claim 63,~~, wherein said R and said R' each comprise at least one 1-triacontanoic alcohol selected from the group consisting of:

a) octyl,
b) nonyl,
c) decyl,
d) undecyl,
e) 10-undecenyl,
f) dodecyl,
g) tridecyl,
h) tetradecyl,
i) pentadecyl,
j) hexadecyl,
k) heptadecyl,
l) octadecyl,
m) 9-octadecenyl,

n) 10,12-octadecadienyl,

o) 13-docosenyl, and

p) triacontanyl radicals.

Claim 69 (currently amended): A composition comprising a self-reversible invert latex, wherein said self-reversible invert latex comprises

a) an oily phase,

b) an aqueous phase,

c) at least one water-in-oil type emulsifying agent, and

d) at least one oil-in-water type emulsifying agent,

wherein said water-in-oil type emulsifying agent or said oil-in-water type emulsifying agent comprises at least one cationic polyelectrolyte composition,

wherein said cationic polyelectrolyte composition comprises a plurality of copolymerized monomeric units of at least one cationic monomer with at least one neutral monomer and at least one nonionic surfactant monomer,

wherein said cationic polyelectrolyte composition present is in a range of from about 20% to about 70% by weight of said self-reversible invert latex,

wherein said nonionic surfactant monomers are represented by at least one formula selected from the group consisting of:

a) $A\text{-}C(=O)\text{-}O\text{-}[(CH_2\text{-}CH(R_1)\text{-}O]_n\text{-}R$ (I)

b) $R'\text{-}[O\text{-}CH(R'_1)\text{-}CH_2]_{n'}\text{-}O\text{-}(O=)C\text{-}A'\text{-}C(=O)\text{-}O\text{-}[(CH_2\text{-}CH(R_1)\text{-}O]_n\text{-}R$ (I')

wherein said n and said n' each are in a range of from about 1 to about 50;

wherein said A is an unsaturated aliphatic monovalent radical comprising from about 2 to about 6 carbon atoms;

wherein said A' is an unsaturated aliphatic divalent radical comprising from about 2 to about 6 carbon atoms;

wherein said R_1 and said R'_1 each comprise at least one component selected from the group consisting of a hydrogen atom, a methyl radical, and an ethyl radical;

wherein said R and said R' each comprise an aliphatic hydrocarbon radical which is saturated, unsaturated, linear, or branched;

wherein said aliphatic hydrocarbon radicals of said R and said R' each further comprise from about 8 to about 30 carbon atoms, and

~~The composition according to Claim 63,~~ wherein said R_1 and R'_1 each further comprise a hydrogen atom.

Claim 70 (currently amended): A composition comprising a self-reversible invert latex; wherein said self-reversible invert latex comprises

a) an oily phase,

b) an aqueous phase,

c) at least one water-in-oil type emulsifying agent, and

d) at least one oil-in-water type emulsifying agent,

wherein said water-in-oil type emulsifying agent or said oil-in-water type emulsifying agent comprises at least one cationic polyelectrolyte composition,

wherein said cationic polyelectrolyte composition comprises a plurality of copolymerized monomeric units of at least one cationic monomer with at least one neutral monomer and at least one nonionic surfactant monomer,

wherein said cationic polyelectrolyte composition present is in a range of from about 20% to about 70% by weight of said self-reversible invert latex,

wherein said nonionic surfactant monomers are represented by at least one formula selected from the group consisting of:

a) $A\text{-}C(=O)\text{-}O\text{-}[(CH_2\text{-}CH(R_1)\text{-}O]_n\text{-}R$ (I)

b) $R'\text{-}[O\text{-}CH(R'_1)\text{-}CH_2]_n\text{-}O\text{-}(O=)C\text{-}A'\text{-}C(=O)\text{-}O\text{-}[(CH_2\text{-}CH(R_1)\text{-}O]_n\text{-}R$ (I')

wherein said n and said n' each are in a range of from about 1 to about 50;

wherein said A is an unsaturated aliphatic monovalent radical comprising from about 2 to about 6 carbon atoms;

wherein said A' is an unsaturated aliphatic divalent radical comprising from about 2 to about 6 carbon atoms;

wherein said R_1 and said R'_1 each comprise at least one component selected from the group consisting of a hydrogen atom, a methyl radical, and an ethyl radical;

wherein said R and said R' each comprise an aliphatic hydrocarbon radical which is saturated, unsaturated, linear, or branched;

wherein said aliphatic hydrocarbon radicals of said R and said R' each further comprise from about 8 to about 30 carbon atoms, and

~~The composition according to Claim 63,~~ wherein said n and n' each comprise a range of from about 1 to about 10.

Claim 71 (previously presented): The composition according to Claim 38, wherein:

a) from about 5% to about 35% of said copolymerized monomeric units comprise said cationic monomer;

b) from about 55% to about 95% of said copolymerized monomeric units comprise said neutral monomer; and

c) from about 0.1% to about 5% of said copolymerized monomeric units comprise said nonionic surfactant monomer.

Claim 72 (currently amended): A composition comprising a self-reversible invert latex, wherein said self-reversible invert latex comprises

a) an oily phase,

b) an aqueous phase,

c) at least one water-in-oil type emulsifying agent, and

d) at least one oil-in-water type emulsifying agent,

wherein said water-in-oil type emulsifying agent or said oil-in-water type emulsifying agent comprises at least one cationic polyelectrolyte composition,

wherein said cationic polyelectrolyte composition comprises a plurality of copolymerized monomeric units of at least one cationic monomer with at least one neutral monomer and at least one nonionic surfactant monomer,

wherein said cationic polyelectrolyte composition present is in a range of from about 20% to about 70% by weight of said self-reversible invert latex,

wherein:

a) from about 5% to about 35% of said copolymerized monomeric units comprise said cationic monomer;

b) from about 55% to about 95% of said copolymerized monomeric units comprise said neutral monomer;

c) from about 0.1% to about 5% of said copolymerized monomeric units comprise said nonionic surfactant monomer, and

~~The composition according to Claim 71,~~ wherein said composition further comprises a non-zero proportion of N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]propenamide monomer.

Claim 73 (previously presented): The composition according to Claim 72, wherein:

a) from about 5% to about 35% of said copolymerized monomeric units comprise said cationic monomer;

b) from about 35% to about 91% of said copolymerized monomeric units comprise said neutral monomer;

c) from about 0.1% to about 5% of said copolymerized monomeric units comprise said nonionic surfactant monomer; and

d) from about 3% to about 20% of said copolymerized monomeric units comprise said N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]propenamide monomer.

Claim 74 (previously presented): The composition according to Claim 73, wherein said composition is not crosslinked.

Claim 75 (previously presented): The composition according to Claim 73, wherein said composition is crosslinked.

Claim 76 (previously presented): The composition according to Claim 75, wherein said crosslinked agent is selected from the group consisting of:

a) diethylenic,
b) polyethylenic compounds,
c) diallyloxyacetic acid,
d) sodium salt,
e) triallylamine,
f) trimethylol propanetriacrylate,
g) ethylene glycol dimethacrylate,
h) diethylene glycol diacrylate,
i) diallylurea, and
j) methylene bis(acrylamide).

Claim 77 (previously presented): The composition according to Claim 76, wherein the molar proportion of said crosslinked agent is in a range of from about 0.005% to about 1% of the total composition.

Claim 78 (previously presented): The composition according to Claim 77, wherein said proportion is in a range of from about 0.01% to about 0.2%.

Claim 79 (previously presented): The composition according to Claim 78, wherein said proportion is in a range of from about 0.01% to about 0.1%.